Massachusetts State
Medical Surge Capacity Plan

December, 2006

DRAFT – UNDER REVIEW

Purpose

The purpose of the Massachusetts Statewide Surge Plan is to optimize resources and delivery of healthcare in the event of an emergency. The plan is all hazards in nature, and is intended to maximize efficiency in response to all types of emergencies: immediate such as explosions, prolonged such as weather emergencies, and continuous such as pandemic influenza. This document is intended to be regularly updated and revised. The most recent version will be available on the Health and Homeland Alert Network. Documents that are included in the resource list or that have web links provided are in Italics. This document is National Incident Management System (NIMS) and National Response Plan (NRP) compliant.

Scope

The scope of this plan covers delivery of healthcare across the State of Massachusetts. Acute and emergent care is covered primarily, and plans for optimization of outpatient care, and communications to minimally injured or exposed is discussed. This plan does not replace existing hospital, business or regional plans, but seeks to provide coordination and support. This Medical Surge Plan will coordinate with and complement existing State readiness initiatives including, but not limited to:

The State Comprehensive Emergency Preparedness Plan (CEMP)
Regional Hospital Surge Plans
The MDPH Pandemic Plan
The Office of Emergency Medical Services Mass Casualty Plan
The Mass Decontamination Plan
The Ambulance Task Force Mobilization Plan

NOTE

This represents an initial draft of the statewide surge capacity plan. This plan will be presented to the Commissioner of the Massachusetts Department of Public Health for approval following review by the Massachusetts Emergency Management Agency, the Statewide Surge Committee, the EMCAB Committee, and the Regional Hospital Planning Committees.

1.0 Definitions

Clusters and Cluster Based Planning
MDPH has assigned every community in Massachusetts to an acute care hospital for the purpose of community based planning. The hospital with its assigned communities and all the community-based preparedness partners therein, form the cluster. The purpose of the cluster based planning is to bring together all the relevant partners to plan for medical surge that overwhelms the capacity of the health care facility and any available mutual aid, necessitating a community based medical surge response. *Cluster maps are available at http://www.mass.gov/dph/bioterrorism/advisorygrps/index.htm.*

Specialty Care Unit (same as Acute Care Center)
A Specialty Care Unit (SCU) is a facility established to provide specialized assistance or medical care in a community-based location. SCUs are community-based healthcare surge facilities that provide limited care to patients that would normally require admission to an acute care hospital. SCUs are ideally located in buildings of opportunity in close proximity to an acute care hospital. SCUs will not manage critical care patients, such as victims requiring artificial ventilation.

Influenza Specialty Care Unit (ISCU)
An ISCU is a SCU to provide supportive care specifically to Pandemic Influenza patients that are too sick to be cared for at home, but not meeting the criteria for admission to an acute care hospital. *More information about ISCUs is available in the State Pandemic Plan, on the HHAN, or at http://www.mass.gov/dph/bioterrorism/advisorygrps/index.htm.*

Health and Homeland Alert Network (HHAN)
The HHAN is one of the primary mechanisms for alerting preparedness and response partners. MDPH has 24/7 capability to send alerts by role based categories, and by level of alert (high, medium, low level alerts). *http://man.dph.state.ma.us/vabtrs/*

WebEOC
WebEOC allows for internet based event management. The Massachusetts Emergency Management Agency (MEMA) and the Boston Emergency Management Agency (BEMA) activate WebEOC during significant events. MDPH has log in capability to both systems, and our bed reporting and diversion sites are accessed by both as well. *http://www.memanet.org/eoc6/*

Non-Hospital Facility Based Care
Non-hospital facility based care could provide additional surge capacity or capabilities during an emergency necessitating surge. This may include nursing home/ long-term care facilities, ambulatory medical clinics, provider offices, and specialty care centers (e.g. plastic surgery, dialysis, chemotherapy, and birthing centers).

Buildings of Opportunity

These are large facilities that are not normally used for healthcare services but have the basic utilities needed to support medical functions. Buildings of opportunity ideally but do not necessarily have internal systems to handle medical oxygen and vacuum capability. Facilities commonly designated as buildings of opportunity include schools, gymnasiums, and armories. The Agency for Healthcare Research and Quality (AHRQ) has published a tool to assist planners in ranking the suitability of buildings of opportunity. It is available in HTML format at *http://www.AHRQ.gov/research/altsites/altmatrix1_final.htm or Microsoft Excel format at http://www.AHRQ.gov/downloads/pub/biotertools/alttool.xls.*

Hospital Surge Capacity

Refers to the quantifiable amount of hospital resources and services (i.e., staff, equipment and space) available to meet an increased demand for medical care. The MDPH survey tool used to quantify hospital surge capacity is available at *http://www.mass.gov/dph/bioterrorism/advisorygrps/index.htm.*

Medical Surge Capacity

Medical Surge capacity is the quantifiable amount of community or regional resources and services available for providing medical care in emergencies that overwhelm the normal healthcare infrastructure (through numbers or types of patients or loss of infrastructure). Medical surge capacity encompasses both hospital and community-based surge capacity efforts and, as such, entails augmenting both non-ambulatory and ambulatory care. This involves both identifying existing assets as well as dynamic assessments of available resources at the time of an event.

Isolation and Quarantine

Isolation is the separation of an ill person from well persons. Quarantine is the separation of a well person who has been exposed to a contagious disease and may be incubating that contagious disease from well, unexposed persons. Both isolation and quarantine are for the purpose of preventing disease transmission.

Emergency Dispensing Site (EDS)

All communities have pre-identified sites and plans to provide mass prophylaxis and/or vaccination to cover the community population within three days, as per guidelines established by the Strategic National Stockpile program. More information about this program is available at *http://www.mass.gov/dph/bioterrorism/advisorygrps/index.htm.*

National Incident Management System (NIMS)

All healthcare facilities, state agencies and providers, and emergency responders are required to be NIMS compliant, as per HSPD 5. Further information is available at *www.mass.gov/eops*

National Disaster Medical System (NDMS)

The National Disaster Medical System (NDMS) is a series of Federal resources controlled by the U.S. Department of Homeland Security (DHS). NDMS is made up of a series of response teams, with some being constructed to treat specific types of patients. Appendix C describes the current construction of NDMS and its available resources. It is

expected that Federal NDMS resources will not be immediately available following an emergency. Consequently, the State must plan for self-sufficiency for at least 72 hours.

Regional Medical Coordination Center (RMCC)
Two regions currently have the capability to establish a coordinating center to monitor and respond to medical surge needs. These are region 1 (Western Ma) and Region 2 (Central MA).

Medical Command and Control (MCC)
Medical Command and Control is usually assumed by EMS at the scene, or by CMED when appropriate. If CMED needs assistance in coordinating the forward movement of patients or obtaining additional assets, the hospitals in the impacted regions will identify a hospital liaison to CMED or the Regional Medical Coordinating Center.

Modular Emergency Medical System
The Modular Emergency Medical System (MEMS) is a conceptual framework for managing a surge in patients requiring triage, prophylaxis, or inpatient care (figure 1). Components of the MEMS associated with managing these needs are the Neighborhood Emergency Help Center (NEHC) and the Acute Care Center (ACC). In addition to these two functional operations, MEMS also describes the need for Medical Command and Control (MCC), development of a Casualty Transportation System (CTS), community outreach efforts, mass prophylaxis planning, and a public information campaign. *Additional description of this system can be found at: http://www.nnemmrs.org/documents/Modular Emergency Medical System - Expanding Local Healthcare Structure In a Mass Casualty Terrorism Incident.pdf.* MDPH is currently working on adapting the MEMS system into the state medical surge plan.

Emergency Operations Center (EOC)
The EOC is where incident management is located. Depending on the event, it may be at a disaster scene, at an individual facility, or at the state level. Hospitals have pre-identified and equipped EOCs. In addition, there are regional and state EOCs (SEOC) and an MDPH agency EOC.

Emergency Management Assistance Compact (EMAC)
This is the process through which state to state transfer of assets occurs. All states have signed the compact.

Strategic National Stockpile (SNS)
The Strategic National Stockpile (SNS) represents a Federal effort to deliver pharmaceuticals, vaccines, as well as medical supplies and equipment in a rapid fashion to supplement local caches in a time of need. The SNS is a scaleable supply source designed to address both the immediate needs as well as the longer sustainment needs associated with a biological, chemical, or nuclear emergency. A “Push Pack” can be delivered in twelve hours containing medications and supplies vital to the reduction of mortality and morbidity associated with a biological, chemical, or nuclear event. In a protracted emergency, the SNS can also supply pharmaceuticals, supplies, and equipment

from the Vendor Managed Inventory (VMI) or by leveraging the purchasing power of the Veterans Administration (VA) system.
The SNS is requested, with permission from the Governor, from the Federal Centers for Disease Control and Prevention (CDC) by the Commissioner of MDPH. The Department of Safety, Homeland Security and Emergency Services is also advised for logistical support services during the deployment of the SNS within Massachusetts.

Federal Medical Contingency Station (FMCS)
Federal Medical Contingency Station (FMCS) is a standardized, scalable surge capacity facility. Similar to the SNS, the FMCS is pre-packaged and ready for immediate deployment by air or land to an existing structure

2.0 State Overview

The Commonwealth of Massachusetts operates under the Comprehensive Emergency Management Plan (CEMP) that establishes the framework whereby the emergency response and recovery actions of all levels of government can be effectively and comprehensively integrated and coordinated. The Massachusetts Emergency Management agency (MEMA) is the lead agency for management of all emergencies in the Commonwealth, and for the coordination of all CEMP activities. The Massachusetts CEMP establishes the fundamental policies, basic program strategies, assumptions, and mechanisms through which the Commonwealth will mobilize resources and conduct activities to guide and support local emergency management efforts during response, recovery, and mitigation.

An emergency management team (MEMT) is comprised of trained representatives from different state agencies and private organizations who are empowered to deploy the resources of their agencies to carry out eighteen different categories of assistance the state offers to local governments following an emergency or disaster. The Department of Public Health is the lead agency for MAESF 8 – Health and Medical. All activity undertaken under the CEMP is coordinated using the Incident Command System (ICS) and the National Incident Management System (NIMS).

In Massachusetts, the healthcare system includes 73 acute care hospitals, 56 chronic hospitals and rehabilitation facilities, 534 clinic locations, 52 community health centers, 463 nursing homes, 53 hospices, 176 home health and VNAs, 65 psychiatric and mental health facilities, and 314 Emergency Medical Services (EMS). There are currently 35 Medical Reserve Corps and 5 Veterans Affairs Hospitals that may become local assets for emergency response. In addition, there are 29,791 private physicians licensed to practice in the state. All acute care hospitals in Massachusetts are accredited by JCAHO, and therefore comply with EC 1.4 and 2.9, which assures baseline capabilities for emergency preparedness and response.

MDPH has established six sub-state hospital preparedness regions. Each Region contains approximately 13 hospitals and is assigned an MDPH Regional Hospital Preparedness Coordinator. The Regional Coordinators meet monthly with their respective hospital disaster preparedness personnel for purposes of planning and coordination. A map of the

hospital preparedness regions and contact information for the Regional Coordinators is available at *http://www.mass.gov/dph/bioterrorism/advisorygrps/index.htm.*

3.0 Direction and Control

3.1 Flowchart

Under development

3.2 Incident Command System (ICS)

All responding entities in this plan use the Incident Command System in compliance with HSPD 5. Hospitals utilize a form of ICS specifically developed for hospitals, and work regionally with the HRSA Regional Coordinator. Public health departments and emergency medical services operate within the parameters established with their regional and/or local emergency management agencies. All work cooperatively within the ESF 8 structure of the region. Each region's public health and hospital coordinators will work with Massachusetts DPH as the Massachusetts Emergency Management Agencies ESF 8 lead.

3.3 Hospitals

Hospitals will provide treatment to patients transported by EMS and those that self-present. Hospitals are also tasked with communicating to MDPH, CMED, and/or the Emergency Operations Center their available number of beds, numbers and types of supplies as requested and numbers/types of patients they can treat. Hospitals are also tasked with operating Mobile Decontamination Units with the assistance of the local fire departments under the Statewide MDU plan. Hospitals will activate their regional mutual aid agreements as needed. If state assistance is needed, they will communicate with MDPH via their regional HRSA coordinator, or in the case of a SEOC activation, the ESF8 desk.

3.4 Department of Public Health (MDPH)

MDPH will operate as the emergency support function health and medical lead for the State of Massachusetts. Through an internal agency EOC and staffing the ESF8 desk at the SEOC as needed, MDPH will coordinate the support of local public health, hospitals, emergency medical services and primary care by accessing state and federal resources as available. These requests will be transmitted through MEMA after a determination of need has been made. MDPH will also facilitate transportation of patients to maximize utilization of healthcare resources across the state.

MDPH provides coordination support for the utilization and movement of resources within and throughout the regions. MDPH is the central point of contact for facilities that require additional personnel, equipment, or supplies. Facilities notify DPH of need via:

- 24/7 Division of Health Care Quality facility emergency contact number
- Nextel/Verizon emergency telephone system (see explanation of communications in Capabilities section of Application)

- Facility disaster preparedness personnel maintain direct contact with DPH Regional Hospital Coordinators

3.5 Emergency Management

The Massachusetts Emergency Management Agency (MEMA) will coordinate emergency operations for the State of Massachusetts. They will provide assistance with the other emergency support functions including, but not limited to, provision of mass sheltering, transportation, and supplies including food, water and fuel. If the SEOC has been activated, the filling and tracking of requests are directed to ESF8 who in turn will direct the request to DPH hospital preparedness central staff who would work with the Massachusetts Hospital Association, DPH regional hospital preparedness personnel, regional EMS offices and other agencies or organizations to fulfill such requests.

During a major incident requiring state response and coordination of intrastate jurisdictions, the CEMP calls for activation of the State Emergency Operations Center (SEOC). The state ICS plan calls for 18 Emergency Support Functions (ESF). Each ESF has a position at the SEOC staffed by a member of the Massachusetts Emergency Management Team (MEMT). MDPH is the lead agency for ESF8, and coordinates requests for medical resources including EMAC, personnel, supplies and transfer of patients during an SEOC activation.

3.6 Community Health Centers/ Primary Care

Community Health Centers and Primary Care establishments will primarily assist by continuing to provide care to their regular patients, as they are able. They will also assist in providing treatment to less acute patients as able. They will communicate as needed with ESF8 at the city's EOC regarding the situation at their facilities, and their ability to assist with the management of a surge capacity emergency. Many community health centers and primary care offices are affiliated with hospitals in the region and will be assisting their partner hospitals during a surge event.

3.7 Emergency Medical Services

Emergency medical services will be primarily responsible for the medical care and on scene management of an incident. Additional resources will be available through local and regional agreements as well as State and federally funded stockpiles, including 13 pre-positioned trailers with surge supplies that may be brought to a scene for additional support. In addition, EMS will provide transport resources to move patients between hospitals and specialty care units. The Massachusetts Ambulance Task Force program consists of 58 task forces, each of which consists of 5 ambulances plus a leader or alternate leader for a total of at least 209 ambulances. The task forces are available to provide surge support if needed. Requests for activation of the program are made to the regional CMED. EMS may also provide triage and treatment on scene to patients who are not transported.

3.8 Law Enforcement

Law Enforcement will provide security, transportation and investigation assets to a surge emergency as available. All requests for law enforcement assets for a hospital or

community health/primary care site will be through regional EOC's; additional assistance requests will be made through MEMA for federal law enforcement assets.

4 Activation and System Response

4.0 Mass Casualty Incident:

Each hospital can initiate a surge emergency on their own, in a decentralized model. State DPH will follow the local/regional declaration with an official surge event notification to rest of region or State depending on size of the event. DPH may declare a public health emergency depending on the size and type of the event. Local hospitals are released to use their SCU materials if necessary.

4.1 Special Event/ Threat/Notification of potential event:

This type of event is declared prior to the surge emergency. The period for surge counts will be predefined. Examples of these would include the Boston Marathon, or July 4th celebrations. If a MCI occurs during the event, surge counts would be updated to reflect the MCI plan. In the absence of an MCI, level 1 and possibly level 2 beds will be counted one to two times a day for a defined period.

4.2 Increase in diversion or outpatient volume:

In the event that an increase in diversion utilization is noted from the website, by a call from regional coordinators, or from an individual hospital facility, statewide notification and region/state level 1 and/or 2 bed counts will begin depending on expected scope of event. Bed reporting may be modified as span expands or contracts.

4.3 Types of beds:

A regional event will result in the counting of level 1 or 2 beds as needed.
A State event will result in the counting of level 1, 2 and 3 beds as needed. An event will always count as a statewide event if level 2 beds are being used in any region.

In some instances, specialty care that exceeds hospital capacity may require standing up a Specialty Care Unit. For example, the a need for short term evacuation, quarantine, decontamination, mass prophylaxis, or supportive flu (or other) care could be handled either in level 4 beds within hospital overflow space, or in pre-identified Emergency Dispensing Sites or Specialty Care Units, assuming staff can be identified for these beds through MSAR, MRCs, off duty hospital staff, or other sources of personnel. If needed to accommodate the surge, MDPH will institute Alternate Standard of Care guidelines, policies and protocols.

An Interstate event will be declared if overflow beds or subspecialty services are needed (i.e. burn, hyperbaric, surgery, chemo, etc) that require out of state transport. All requests for out of state mutual aid for medical resources (including personnel and supplies) are directed to MEMA. MEMA is the state coordinating agency for EMAC.

A request for subspecialty beds/transfers will go through the regional coordinators to MDPH for interstate cooperation. If a hospital or Boston Medflight arranges direct transfer, they will notify the regional coordinator of the transfer.

5.0 Communications

Prior to activation of the SEOC, requests for mutual aid are made via the HHAN and the Nextel or Verizon hospital telephone systems. Redundant data collection may occur through reports to ESF-8 from data collected by Regional C-MED centers, the HHAN or the Nextel or Verizon telephone systems.

5.1 Nextels

Nextel cellular and direct-connect telephones, and GETS cards have been distributed to all acute care hospitals, EMS regions, CMED communication centers and key public safety partner agencies. All are on a single fleet allowing for statewide, regional and local group call capability, which is exercised at least weekly.

5.2 Satellite Phones

Hospitals and CMEDs have been provided satellite phones. These phones will be drilled on a monthly basis and will are intended to provide redundant communication system in the event the other systems fail.

5.3 CMED

Regional CMEDs are responsible for coordinating the forward movement of patients, and communicating to MDPH when additional assistance is required. They receive information about events and relay that information to the hospitals and MDPH. They are responsible for entering the Diversion status of hospitals on the Diversion website.

5.4 Conference Calls

Email list serves and statewide conference calls were developed and are utilized on a regular basis.

5.5 Regional Notification Systems

Under development

6.0 Critical Issues

6.1 Special Needs Populations

Collaboration with the Massachusetts Department of Mental Health for the provision of psychiatric and counseling services, training of behavioral health counselors, mental health clinical direction and technical assistance during a disaster, the development of public risk communication messages regarding emotional well being, coping, panic mitigation in the event of a terrorist attack and the study of outcomes of crises response efforts.

Pediatrics (under development)

6.2 Mass Care/ Special Needs Shelters

MDPH and MEMA are currently planning ESF6 responsibilities and planning for shelters, including special needs shelters.

6.3 Isolation and Quarantine

Local health departments are responsible for quarantine and isolation at the local level. All hospitals are required to have isolation capacity. MDPH and the Boston Public Health Commission are working with the CDC Quarantine officer at Logan Airport on Isolation and Quarantine planning.

6.4 Trauma/Burn Surge

Hospitals would access surge capacity for these victims as needed, using hospital mutual aid agreements, the statewide bed and ventilator reporting site, and interstate or federal assistance through EMAC and/or NDMS as indicated. MSAR would also be used to contact and deploy relevant health care professionals. Ambulance task forces would be activated to assist with patient movement. SNS assets would be requested if needed.

6.5 Radiation Injury

Hospitals would provide triage to the large number of self reported casualties following public communication of a radiation event, as well as surge capacity for these victims as needed, using hospital mutual aid agreements, statewide bed and ventilator reporting site, and interstate or federal assistance through EMAC and/or NDMS as indicated. MSAR would also be used to deploy relevant health care professionals. Ambulance task forces would be activated to assist with patient movement. EDS sites would be activated to provide additional triaging and Potassium Iodide if indicated. SNS assets would be requested if needed.

6.6 Botulinum

It is expected that the initial cases of botulinum would go undetected and would result in ICU admissions with mechanical ventilation. Hospitals would access surge capacity for these victims as needed, using hospital mutual aid agreements, statewide bed and ventilator reporting site, and interstate or federal assistance through EMAC and/or NDMS as indicated. SNS assets would be requested if needed.

6.7 Decontamination

Every hospital is assigned a Mass Decontamination Unit (MDU) to protect the hospital from contamination and provide for large-scale mass decontamination of patients. The hospitals work in conjunction with their local fire departments as part of the local incident management system to develop protocols, stand up and exercise mass decontamination and incident management protocols. A Statewide MDU Activation Plan activates MDU mutual aid through fire services.

6.8 Laboratory Surge

There are 76 sentinel laboratories in Massachusetts including 10 private laboratories, 53 of which are hospital laboratories funded through HRSA. All of the sentinel laboratories are BSL-2. One HRSA funded hospital laboratory in Massachusetts with BSL-3 capabilities is registered as a LRN (level-B) reference laboratory. The function of this laboratory will be to provide surge capacity with respect to the following agents:

Bacillus anthracis, Yersinia pestis, Francisella tularensis and *Clostridium botulinum*. There are numerous BSL-3 research laboratories in the state; however, they are not regulated by the state, so the exact number is not known. There are 4 labs in Boston and at least 2 BSL-3 research laboratories in Cambridge. The LRN does not typically register research facilities, therefore these facilities are not currently integrated in the hospital LRN network. The MDPH SLI is the only LRN confirmatory laboratory in the State for BT testing and currently has 2 BSL-3 laboratories; therefore, all sentinel laboratories refer suspect BT agents to the SLI. The SLI is also the only LRN-C laboratory in the State and the only LRN-C Level One laboratory in New England; therefore, all hospitals in New England refer suspect CT specimens to the SLI.

6.9 Radiology Surge
Under development

6.10 Movement of critical staff
Under development

7.0 Method of Reporting Bed Status

7.1 State Diversion Website
Bed Availability will be reported on the State Diversion Website. This website may be accessed directly or through regional WebEOC applications. Beds will be reported according to standard definitions provided on the bed matrix (see resource list). In the event of an emergency requiring special types of care (i.e. burn beds, isolation, etc.) categories may be added to the site. In addition, the site may be used to monitor the availability and status of certain supplies and equipment, such as antivirals, antibiotics, and ventilators.

7.2 Alternate Reporting
In the event that the Internet is down or not accessible by hospitals, hospitals may report their bed availability through regional CMEDs. The matrix will be printed out and faxed to the regional CMED as long as phone lines are available. If phone lines are not available the information will be transmitted at request from CMED by radio. The regional CMED will share that information with MEMA and the ESF #8 staff.

8.0 Personnel
ESF8 will be the point of contact for coordinating volunteer healthcare personnel resources.

8.1 Hospital Staff
Hospital staff will work within their facility as directed by facility disaster plans. Hospital staff will not be pulled to work at alternate sites unless the hospitals are adequately staffed and give permission. Regional hospital mutual aid agreements exist in all regions and support sharing of personnel between hospitals, as well as supplies and equipment. Hospitals may use their mutual aid agreements without a declared public health emergency, or state EOC activation.

8.2 Medical Reserve Corps (MRCs)

MRCs are local resources and are not under state control or activation. Local, regional or state ESF8 desks may request activation of an MRC. Should they agree to deploy, MRC's will call up their staff and provide staff as needed to their regional hospitals, disaster scene, and/or Specialty Care Unit.

8.3 MMRS

Staff sharing agreements that exist within local MMRS programs may be utilized to provide regional staffing resources at the discretion of the regional coordinators/managers.

8.4 MSAR

MSAR will keep a database and record of all medical personnel willing to volunteer in an event and provide pre-credentialing of health care professionals. MSAR activation requires approval of a specific request by the Commissioner or his/her designee and can only be activated under a declared public health emergency when the local/regional assets are not sufficient to provide care.

8.5 Just in time volunteers

Just in time volunteers will be utilized as they can be registered, screened and credentialed.

8.6 Family

Care provided by family and friends will be encouraged. Training materials will be provided to family and friends to teach them how to do basic patient care such as feeding, monitoring, and bathing.

9.0 Equipment and Supplies

MDPH is seeking funding to resource 5,000 level 4 beds to include the physical beds, and the equipment and supplies necessary to provide basic first and supportive care. Supplies will include room air concentrators, basic suctioning equipment, IV hydration, IV antibiotics, and nebulization treatments. These resources will be in part pre-positioned within hospitals, and in part stored regionally for deployment as needed. Hospitals may request these resources when available from the local, regional or state ESF8 logistics coordinator. Transportation of the resources will be the responsibility of the hospital, the cluster communities, or MEMA, depending on the nature of the incident. In addition, each hospital must have back up supplies, and/or vendor agreements, for the following:

9.1 Oxygen

9.2 Ventilators

MDPH is seeking funding to purchase additional ventilators. These machines will be offered to hospitals and/or EMS services for daily and surge use as needed, but will be considered a state asset available for deployment as needed. In order to maintain them as a deployable asset, they will be available for transport and short term patient care only.

9.3 Medications

Under federal funding administered by MDPH, all hospitals have and are required to maintain a 3 day supply of oral antibiotics for their staff and their families.

9.4 Beds

9.5 Consumables

Hospitals should plan to have a week of surge supplies on hand, and agreements in place with vendors to provide additional supplies if needed.

9.6 Food

Hospitals should plan to have a week of food on hand, and agreements in place with vendors to provide food services if needed.

9.7 Water

Hospitals should plan to have a week of water on hand, and agreements in place with vendors to provide potable water if needed. Additional supplies of sterile water should be available to meet the needs of surgical and dialysis patients.

9.8 Fuel

Hospitals and other emergency facilities should endeavor to have generator power with at least three days of fuel available. Plans to re-supply fuel should be made. If an emergency exists and no fuel is available to power critical functions, a request to MEMA may be made for assistance.

10.0 Blood

MDPH is working with the American Red Cross to develop protocols for surge blood supply.

11.0 Authorities, Altered Standard of Care Guidelines and Liability

Authority of Commissioner of Public Health

Declaration of a Public Health Emergency

Relaxation of regulatory requirements, waivers, and standing orders: MDPH will assist the medical sector by providing regulatory relief during emergency response as warranted. Relevant laws or regulations that may need to be revised or temporarily suspended in a public health or medical emergency will be identified during preparedness planning, and processes for their revision or temporary suspension will be formally described.

Altered Standards of Care

During medical surge emergencies, there may be shortages of healthcare resources that will necessitate altered standards of care. The goal of an organized and coordinated response to a mass casualty event should be to maximize the number of lives saved. Changes in the usual standards of health and medical care in the affected region will be required to achieve the goal of saving the most lives in a mass casualty event. Rather than doing everything possible to save every life, it will be necessary to allocate scarce resources in a different manner to save as many lives as possible. Protocols for triage and

treatment need to be flexible enough to change as the size of a mass casualty event grows and will depend on both the nature of the event and the speed with which it occurs.

The Harvard School of Public Health convened a task force to inform altered standard of care practices. Clinicians, ethicists, lawyers, and state policy makers worked met regularly and conducted focus groups with consumers and health professionals. The MDPH Draft Guidelines for Altered Standard of Care that were adopted by this group are available at *http://www.mass.gov/dph/bioterrorism/advisorygrps/index.htm.*

Liability

The regional mutual aid agreements provide a mechanism for hospitals to share resources, including personnel, by extending the liability and workmen's compensation benefits to the employee while at the receiving hospital. State employees only are able to be deployed with liability coverage through EMAC. Non-paid volunteers assisting in a dater response are covered under the Good Samaritan laws. MPDH is currently working with insures to determine liability provisions for care delivered in SCUs. At this time, legislation is pending to provide liability coverage to health care professionals and other citizens who assist in a response. A summary of current liability provisions is available at *http://www.mass.gov/dph/bioterrorism/advisorygrps/index.htm.*

Reimbursement

No payment from victims/patients shall be expected at the time of service. Withholding essential treatment due to patients' inability to pay is not acceptable under any circumstances. Providers should plan to closely account for services provided, as any reimbursement would be retroactive in nature. The State is currently considering means by which to create an agreement with insurers to cover costs incurred during emergency situations.

12.0 Specialty Care Units

In the event of an outbreak of influenza, or other natural or unnatural disaster, which precipitates a sudden and/or severe influx of patients requiring hospital care that is substantially greater than the hospital's capacity to provide care, then a Specialty Care Unit (SCU) may be activated to provide surge capacity for hospital patients or for victims/casualties. For planning and preparedness purposes, the SCU activated to provide supportive care to flu patients will be termed the "Influenza Specialty Care Unit (ISCU)." The ESF8 desk will monitor and coordinate all SCU activity. SCU and ISCU planning guidelines and applications are available at *http://www.mass.gov/dph/bioterrorism/advisorygrps/index.htm.*

13.0 Handling of Deceased

13.1 Terrorist/Criminal Event

The Office of the Chief Medical Examiner (OCME) has primary responsibility for deceased persons in the State who are the victims of a criminal/terrorist event. They will manage the fatalities according the OCME emergency operations plan.

13.2 Naturally Occurring Event

If there is a naturally occurring surge event including pandemic influenza hospitals are primarily responsible for the deceased within their facility. They will work with local funeral directors to facilitate burials. Deaths that occur at home will be managed according to local protocols. If the region/local EMA finds that deaths are outpacing the ability of the local funeral directors to manage, they may request assistance from MEMA to provide refrigeration resources. Finally, altered standard of care protocols are currently being developed to govern the handling of the deceased in extreme circumstances such as pandemic influenza.

14.0 Movement and Tracking of Patients

14.1 Electronic Patient tracking:

Electronic patient tracking will be available in certain regions. Region 4C (Boston) has s system in place. Region 1 will be added in 2007. Additional regions will be added as resources are available.

14.2 Secondary patient tracking:

Regional EMS and hospitals will endeavor to manually track the movement of patients as possible during an event. Hospitals will update MDPH of the patients who were involved in the event who have been admitted to their facilities, and will make a best guess attempt to quantify the total number of people involved in an event who were treated.

Three of the six hospital preparedness regions have plans in place to develop regional medical coordination centers. The centers, when activated, will provide for regional coordination of the forward movement of patients during a large scale event and providing a communications and information link between the disaster and the impacted facilities and MDPH. In addition to the forward movement of patients, they can provide operational and logistic assistance. The centers provide a single point of contact for regional medical assets, coordinates, and communicates the movement of patients. Once complete, RMCC plans will be included as an appendix to the State plan.

14.3 Interstate movement:

An Interstate event will be declared if overflow beds or subspecialty services are needed (i.e. burn, hyperbaric, surgery, chemo, etc). A request for subspecialty beds/transfers will go through MEMA to MDPH for interstate coordination. If a hospital or Boston Medflight arranges a direct transfer, they will notify MEMA of the transfer and receiving hospital. If automated tracking is in place, the system will be updated manually to reflect the out of state receiving facility.

15.0 Federal Assistance

When response to a disaster or emergency incident exceeds the resources and capabilities of Massachusetts to manage, MEMA will notify officials at FEMA Region I of the Governor's forthcoming request for Federal assistance and a Presidential Disaster

Declaration. FEMA authorities will deploy a FEMA Liaison Officer to the SEOC and/or deploy the ERT-A when a Presidential disaster declaration appears imminent.

Following a major disaster declaration by the President, the Federal Response Plan (FRP) will be activated, opening the channels for Federal assistance through Federal Emergency Support Functions. State ESF-8 personnel will work directly with Federal ESF-8 personnel to coordinate and track the receipt of the requested federal assistance.

Assets may be requested from the National Disaster Medical System (NDMS) or the Strategic National Stockpile (SNS), including the Federal Medical Contingency Station (FMCS). See resource list for more information.

16.0 Recovery

The recovery phase of a surge capacity emergency will focus on short-term and long-term operations. The short-term operations will seek to restore healthcare services in the region to pre-emergency levels. Each hospital in the state will have procedures in its disaster plan to manage recovery operations in its facility. Long-term operations will focus on improvement of consequence management plans to respond to future emergencies. The hospitals, community health centers, primary care, and long term care facilities and the State will continue working collaboratively during recovery operations.

The types of activities that could be conducted during the recovery phase include:

- Damage assessment
- Environmental consequence assessment
- Long-term protective actions determinations
- Facility and/or environmental restoration
- Dissemination of information and recovery guidelines

17.0 Process for Recommending Change:

Changes to this plan will be recommended and facilitated through the State Surge Committee, or by its designated workgroup.

The State Comprehensive Emergency Preparedness Plan (CEMP): www.mass.gov/mema (secure log in)

The MDPH Pandemic Plan: http://www.mass.gov/dph/cdc/epii/flu/pandemic_plan.htm

The Office of Emergency Medical Services Mass Casualty Plan: http://www.mass.gov/dph/bioterrorism/advisorygrps/index.htm.

The Mass Decontamination Plan: http://www.mass.gov/dph/bioterrorism/advisorygrps/index.htm.

Health and Homeland Alert Network: http://man.dph.state.ma.us/vabtrs/

WebEOC: http://www.memanet.org/eoc6/ (secure log in)

Strategic National Stockpile: http://www.mass.gov/dph/bioterrorism/advisorygrps/index.htm.

Emergency Dispensing Sites: http://www.mass.gov/dph/bioterrorism/advisorygrps/index.htm.

National Incident Management System (NIMS): http://www.mass.gov/mema. Click on NIMS

State Preparedness Regions: A map of the 6 hospital preparedness regions and contact information for the regional hospital coordinators is available at: *http://www.mass.gov/dph/bioterrorism/advisorygrps/index.htm.*

Bed Reporting Matrix and definitions: http://www.mass.gov/dph/bioterrorism/advisorygrps/index.htm.